BELANGRIJK:

houd deze schema's bij het orgel!!

IMPORTANT:

keep the schematic diagrams with the organ!!

Schaltpläne bei Orgel aufbewahren!!



0275



STRING - ENSEMBLE

INHOUD - CONTENTS - INHALT	Part No.*	Sheet No.
Gate circuit	021.0001	
Bass circuit	003.3015	
Divider circuit A	005.0077	
Divider circuit B	005.0078	
Register circuit	003.3016	
Master oscillator circuit	005.0071	
Schematic diagram		015.0212
Wiring diagram		015.0213
Signal flow diagram		015.0214
Control circuit	012.0025	
Modulator circuit B	012.0022	
Divider circuit C	005.0082	
Power supply	008.0066	

*Printed circuit Part number!

TECHNISCHE GEGEVENS

TECHNICAL

TECHNISCHE

DATA

DATEN

Netfrequentie

Mains frequency

Netzfrequenz.

50/60 Hz

Netspanning*

Mains voltage*

Netzspannung*

220 V (115-240-250*)

Ingang (input): Expressionpedal

Input connection: Expressionpedal

Eingang (input): Schwellpedal

Output: Low output I High output II

Output: Low output I High output II Ausgangsabnahme: Low output I High output II

± 1,5 V tt - imp: 3 kOhm ± 5 V tt - imp: 5 kOhm

Zekeringen: net: 220 V* 18,5 V 2x traag

Fuses: mains: 220 V* 18,5 V 2x slow action

Sicherungen: Netz: 220 V* 18,5 V 2x träge

thermal release in primary winding (micro STB 4239 disconnect temp. 115 C) 3,15 Amp.

* 115 - 240 - 250 V.

- *Voor 115, 240 en 250 Volt netspanning; als volgt te werk gaan:
- -verwijder kap van de transformator
- -de draad op de 220 V aansluiting omzetten naar de gewenste netspanning
- *For 115, 240 and 250 Volt operation:
- -remove cover of transformer
- -relocate mains voltage to appropriate voltage.
- *Für 115, 240 und 250 V Netzspannung wie folgt handeln:
- -Die Kappe des Transformators entfernen
- -Den Draht des 220 V Anschlusses in die gewünschte Netzspannung umsetzen.

Service dokumentatie: Service information:

Service onderdelenlijst zie: Service parts list see:

Kundendienst dokumentation:

Service-Erzatzteilenliste siehe:

(aanvragen bij servicedienst te Bodegraven) (inquire by your importer or MCH Holland) (fragen Sie bei Ihrem Importeur oder MCH)



Schema beschrijvingen zie: For theory of Operation see: Schaltplanbeschreibungen siehe:



Storings- en lokalisatielijst zie Trouble shooting guide see: Fehlersucheliste siehe:



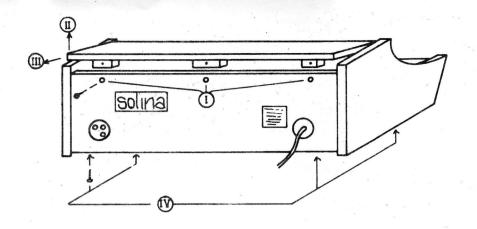
ATTENTIE:

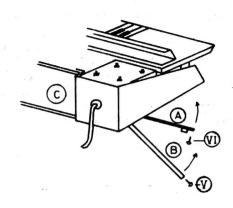
ATTENTION: **ACHTUNG:**

THEORY OF OPERATION:

Divider circuit * 2 *

Divider circuit should be *2* instead of *1*





DEMONTAGE STRING-ENSEMBLE

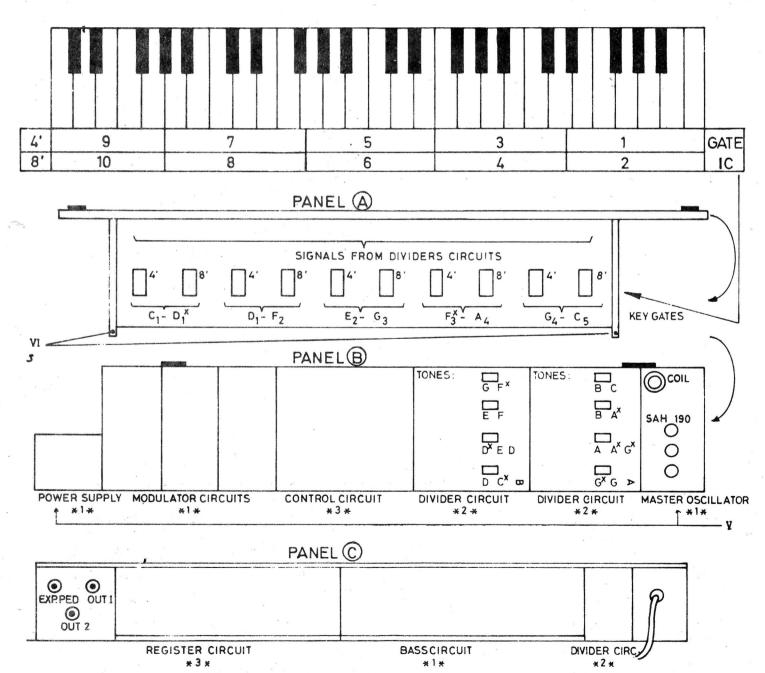
- 1. Verwijder schroeven(1)
- 2. Til bovenblad op, zie(II)
- 3. Schuif bovenblad weg, zie (1)4. Verwijder schroeven (V)
- 5. De konstruktie kan nu uit de kast worden getild.
- 6. De panelen A en B zijn klapbaar na verwijdering van schroeven (V) en (V)

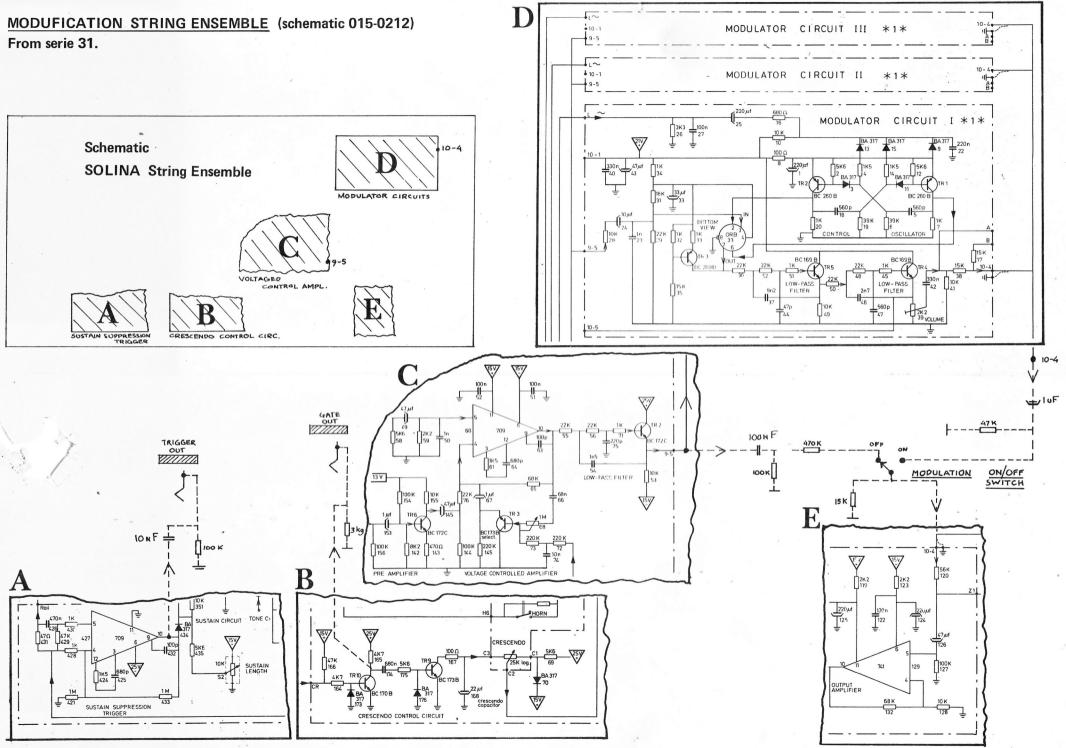
DISASSEMBLY OF STRING-ENSEMBLE

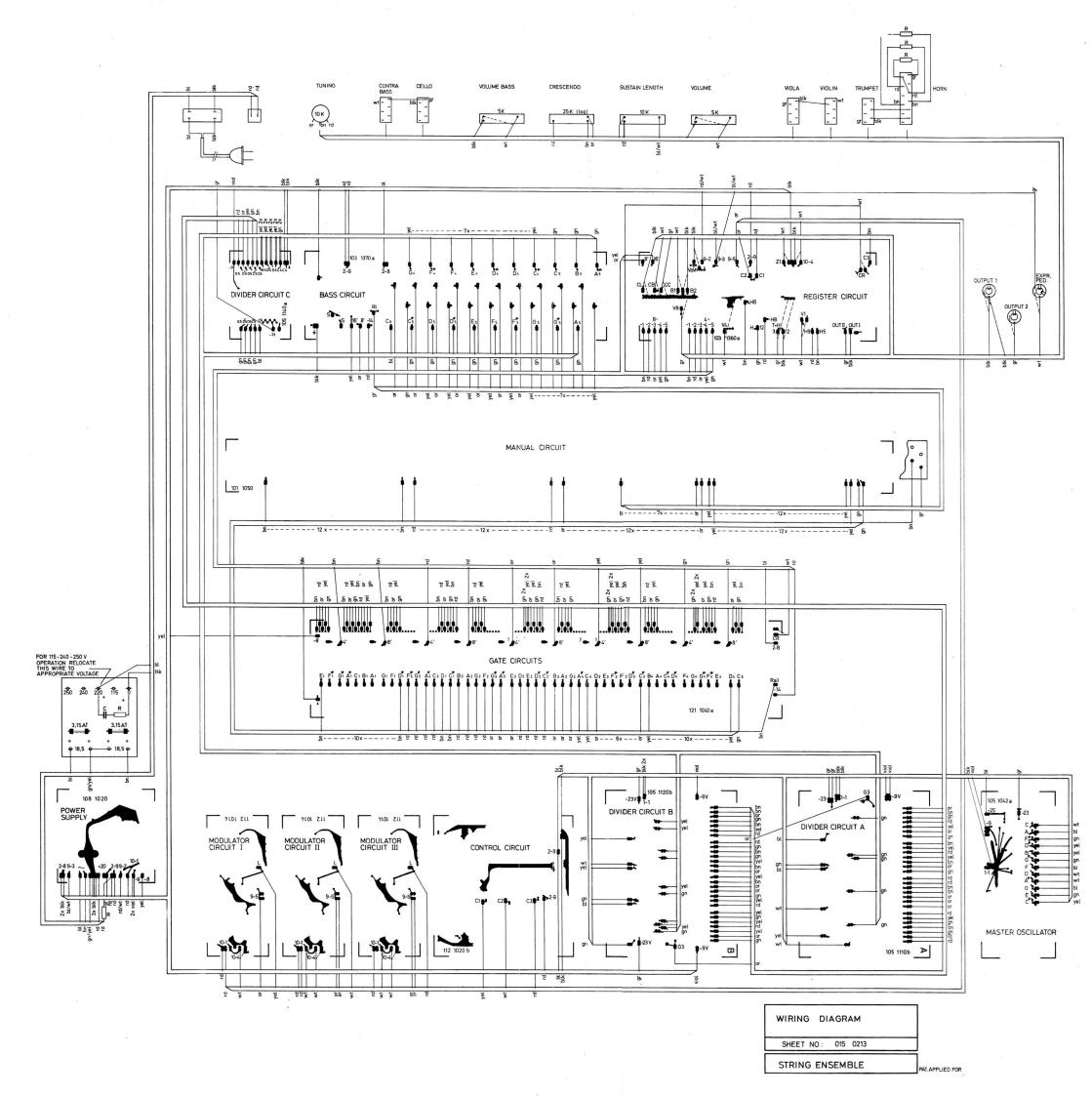
- 1. Remove (3) screws(1)
- 2. Raise cover, see(II)
- 3. Push cover out of the way, see (1)
- 4. Remove (4) screws (V)
- 5. Lift out unit from cabinet
- 6. Panels A and B will fold out of way after removing screws(V) and (V).

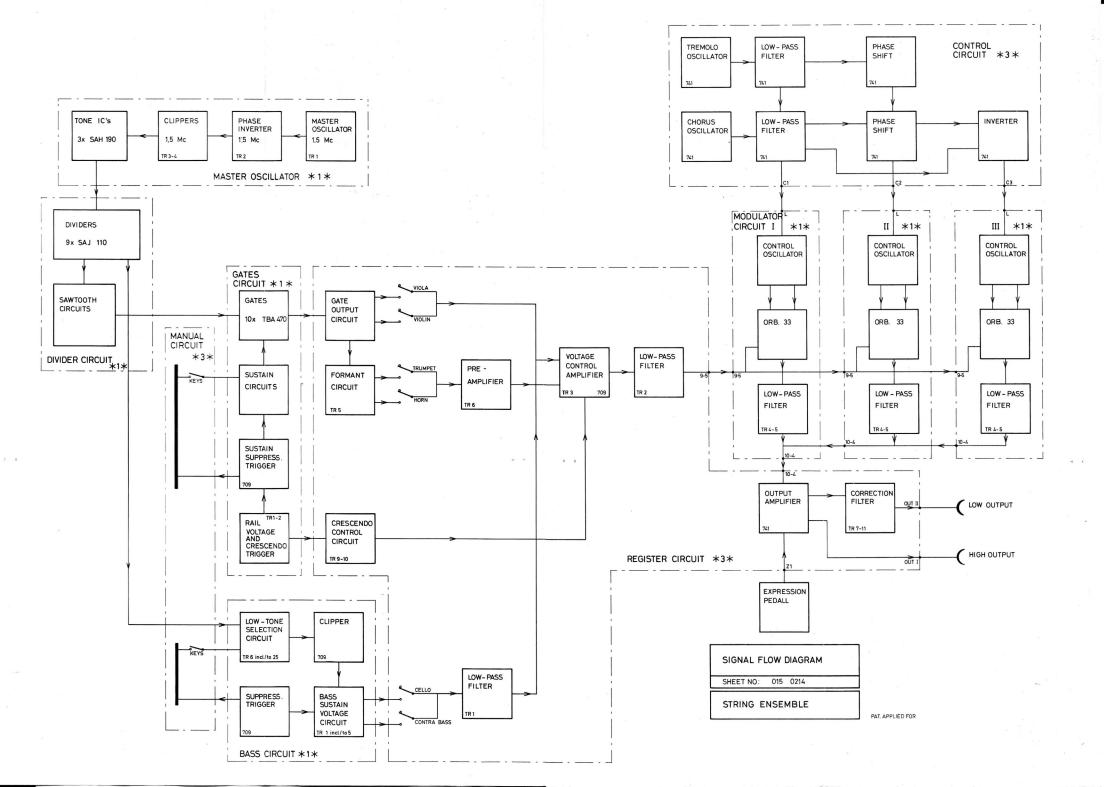
DEMONTAGE STRING-ENSEMBLE

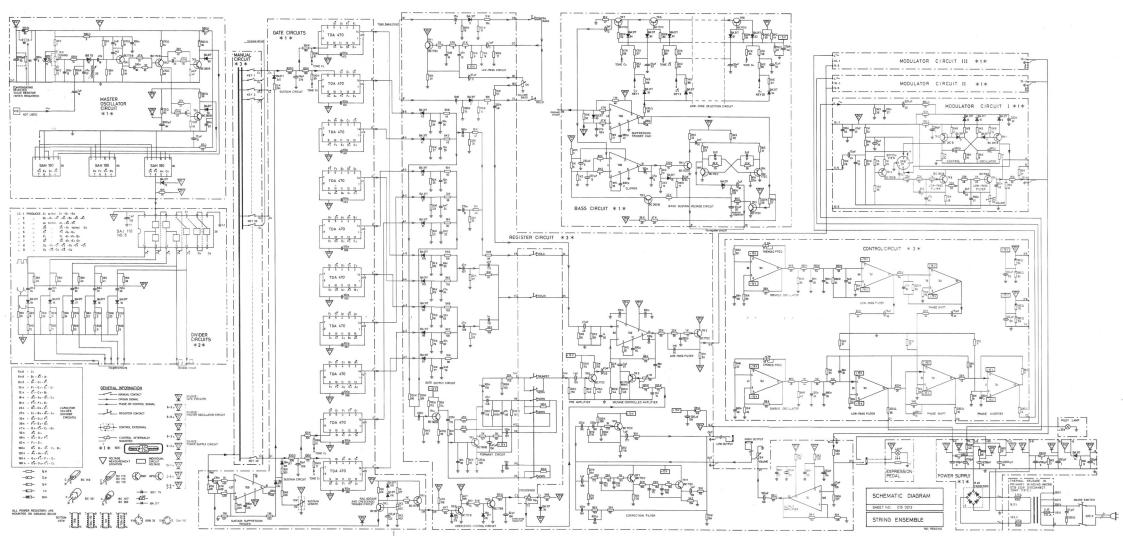
- 1. Schrauben rausdrehen (siehe I)
- 2. Oberbrett anheben (siehe II)
- 3. Oberbrett wegschieben (siehe III)
- 4. Schrauben rausdrehen (siehe IV)
- 5. Die Konstruktion kann jetzt aus der Kiste gehoben werden.
- 6. Die Paneelen a und b sind klappbar, nachdem die Schrauben rausgedreht sind. (siehe V und VI).



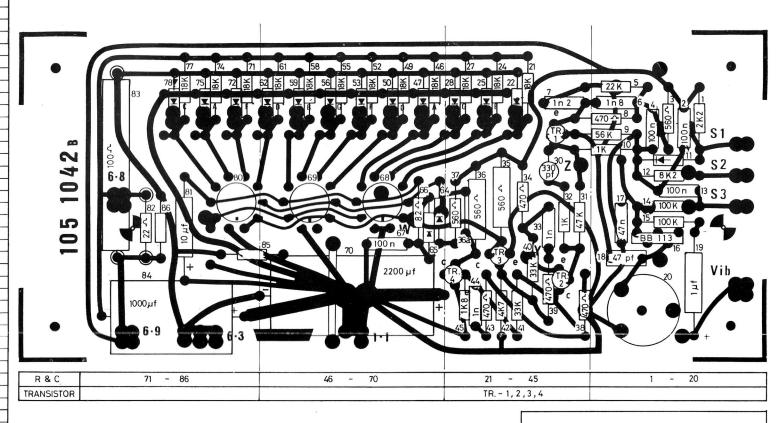








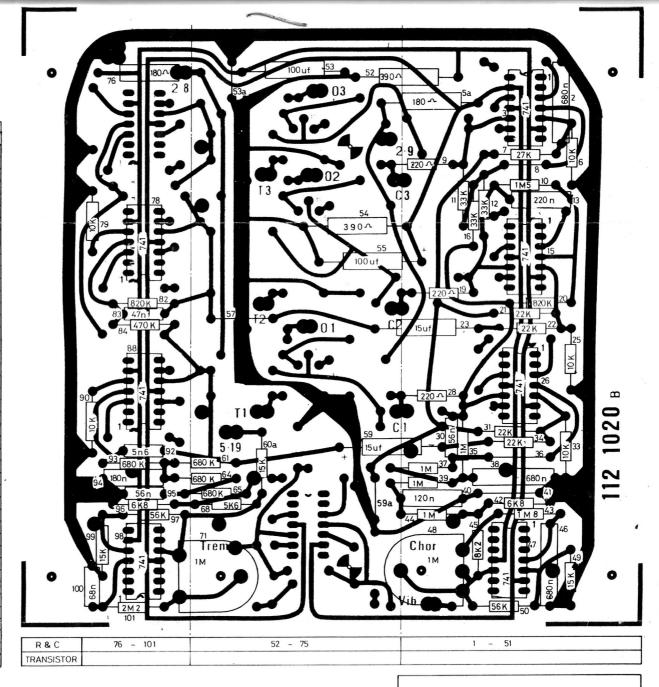
1	210 - 3182	RESISTOR	45
	210 - 3829	31	66
	210 - 3471	n	8,34,38,39,43
	210 - 3561	n	3
	210 - 3102	>>	10,32
	210 - 3222	э	1
	210 - 3472	>>	42
	210 - 3822	>>	12
	210 - 3183	n	21,24.27.46.49,52.55,58,61,71,74,77
	210 - 3223	»	5
	210 - 3333	n	40,41
	210 - 3473	n	31
	210 - 3563	»	9
	210 - 3104	»	14,15
	211 - 3229	>	82
	211 - 3561	»	37
	211 -	>	85,86
	212 - 3561	'n	35,36
	216 - 3101	'n	83
1	310 - 2122	CAPACITOR	7
	310 - 2102	»	33,34
	310 - 2182	»	6
	310 - 2104	ж	2,4,13,67
	310 - 2473	»	17
	313 - 2331	"	30
	313 - 5479	»	18
1	314 - 6222	EL CAPACITOR	70
l	314 - 8108	» "	19
	314 - 8109	2)	81
1	314 - 6102	>>	84
	411 - 1702	TRANSISTOR	TR. 2
	411 - 1732	»	TR. 1
	411 - 2602	23	TR. 3,4
1	420 - 0317	DIODE	22,25,28,47,50,53,56,59,62,64,65,72,75,78
	424 - 0279	23	11
1	430 - 0113	»	16
1	436 - 0190	I.C.	68,69,80
	600 - 3586	COIL	20 .
-	500 - 0907	JUMPER WIRE	36a
1	125 - 0161	TUBE	2
	775 - 0002	CABLE TIE	1
1	900 - 0031	BEAD	4
1		CIRCUIT BOARD	
L	PART. NO.	NAME	POSITION NO.



MASTER OSCILLATOR

PART. NO. 005 - 0071

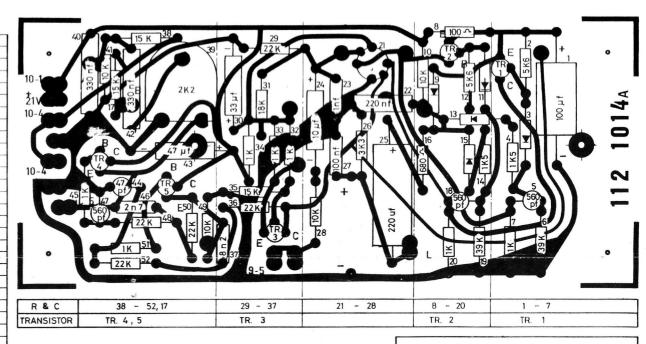
900 0031	DEAD	
900 0031	BEAD	4 x 4 3
	RESISTOR	
210 - 3221	RESISTOR	9, 19, 28
210 - 3822	"	45
210 - 3562	'n	68
210 - 3682	97	42,96
210 - 3103	,,	6 . 25 . 33 . 79 . 90
210 - 3153	>>	49,99, 60a
210 - 3223	,,	21,22,31,34
210 - 3273	n	7
210 - 3333	» <i>,</i>	11 , 12 , 16
210 - 3563	"	50 , 97
210 - 3474	»	84
210 - 3684	,,	61 , 64 , 65 , 93
210 - 3824	»	20 , 82
210 - 3105	"	35 , 37 . 39 , 44
210 - 3155	n	10
210 - 3225	"	101
212 - 3391	,,	52 , 54
213 - 3181	,,	5a , 76
	CAPACITOR	
310 - 2562	1 >	92
310 - 2473	3)	83
310 - 2563	»	30 , 95
310 - 2683	n	100
310 - 2124	,,	40
310 - 2184	"	94
310 - 2224	,,	13
310 - 2684	77	2,38,46
314 - 8159	EL CAPACITOR	23 , 59
0.33	LL CAI ACTION	20,00
314 - 7101	,,	53 , 55
230 - 0063	POT. METER	48 , 71
436 - 0741	I. C.	3 . 15 . 26 . 47 . 78 . 88 . 98
500 - 0905	JUMPER WIRE	8 · 36 · 41 · 57 · 53a,59a
	CIRCUIT BOARD	0, 00, 41, 01, 100-,004
	NAME	POSITION NO.
PART. NO.	INAIME	FUSITION NO.



CONTROL CIRCUIT

PART. NO. 012 - 0025

210 - 3393	RESISTOR	6,19
210 - 3223	,,	29 36,48,50,52
210 - 3153	*	17. 35 , 38, 31
210 - 3103	>>	10, 28, 41, 49
210 - 3102	»	7, 20, 32, 33, 34, 45, 51
210 - 3562	»	2,12
210 - 3332	2)	26
210 - 3681	"	16
210 - 3101	N N	8
210 - 3152	33	4,14
210 - 3183	, w	31
310 - 2272	CAPACITOR	46
310 - 2822	,	37
310 - 2102	,a	23
310 - 2104	3	27
310 - 2224	>	22
310 - 2334	>	40 , 42
313 - 2479	2)	44
313 - 2561	. ,	5,18.47
314 - 6221	ELCAPACITOR	25
314 - 7101	y .	1
314 - 7479	,	43
314 - 7339	N	30
314 - 8109	13	24
411 - 1692	TRANSISTOR	TR. 4,5
411 - 2602	×	TR. 1,2,3
420 - 0:317	DIODE	3,9,11,13,15
230 - 0055	POT. METER	39
436 - 0033	I. C.	21
112 - 1014 A	CIRCUIT BOARD	
PART. NO.	· NAME	POSITION NO.



MODULATOR CIRCUIT B

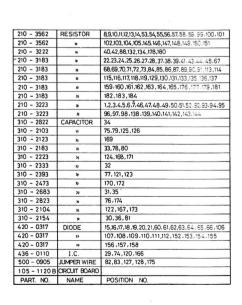
PART. NO. 012 - 0022

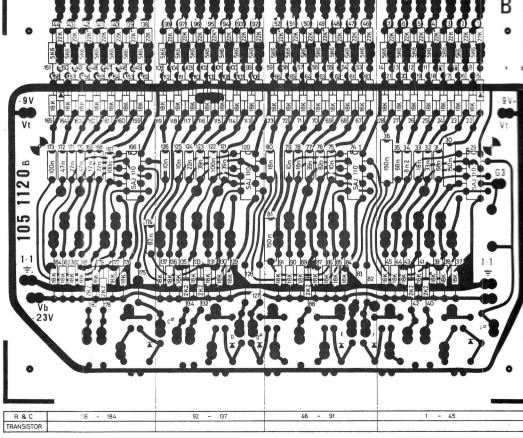
210 - 3222	RESISTOR	44, 45, 90, 91, 137, 182
210 - 3562	»	8.9,10.11,12,13,14.53,54,55,56,57,58,59,99,100
210 - 3562	"	101, 102, 103, 104, 105, 145, 146, 147, 148, 149, 150, 151
210 - 3183	n	22,23,24,25,26,27,28,37,38,39,40,41,42,43,67
210 - 3183	"	68,69,70,71,72,73,82,83,84,85,86,87,88,113
210 - 3183	"	114,115,116,117,118,119,128,129.130.131,132,133,134
210 - 3183	»	159,160,161,162,163,164,165,174,175,176,177,178
210 - 3183	,	179,180
210 - 3223	»	1,2,3,4,5,6,7,46,47,48,49,50.51,52.92,93,94,95
210 - 3223	»	96,97,98,138,139,140,141,142,143,144
310 - 2562	CAPACITOR	34
310 - 2682	» -	35.77.125
310 - 2822	,,	127, 167
310 - 2123	"	33.36
310 - 2153		76,124,171,173
310 - 2273		32,79,80,123
310 - 2333	>>	170,172
310 - 2473	n	31,78
310 - 2563	,	- 81.122
310 - 2683	n	169
310 - 2104	39	30.75
310 - 2124	39	121,126 ,168
314 - 8108	>>	183
420 - 0317	DIODE	15,16,17,18,19,20,21,60,61,62,63,64,65,66
420 - 0317	· »	106.107.108,109,110.111.112,152,153,154,155,156
420 - 0317	»	157, 158
436 - 0110	I. C.	29,74,120,166
500 - 0905	JUMPER WIRE	89, 135, 136, 181
105-1110 B	CIRCUIT BOARD	
PART, NO.	NAME	POSITION NO.

3333333	3333333	3333333	3333333	Α
TIENENEMENEMENEMENEMENEMENEMENEMENEMENEME	<u> </u>			• • •
[8] [8] [8] [8] [8] [8] [8] [8] [8] [8]		9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		Ξ
60 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E 1 E				0.5
Vt 162 164 163 165 161 160 169 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		73 72 71 170 65 68 67 73 72 73 70 70 70 70 70 70 70	188 187 188 189	_
- 121 120 (cc) 165		80 79 78 77 76 75 .74	36 5 35 34 33 32 31 30 33	•
G3 172 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	120 n			
				2)
			[4]\$[\$] //	/
1 - 1 אַמַן פֿרון פֿרון אָרוּ פּרוּן אָפּרין	134 133 1132 131 130 129 128	88 87 86	[43] [42] [41] [40] [39] [39]	3
英文 英文 英文 英 英	章 · 英 · 英 · 英 · · · · · · · · · · · · ·	英 英 英 英 英 英 英 589	1	
Vb hear	137	lg1 lg0	45 44	
-23V	8 17 6 88			•
183		4		
				•
R&C 138 - 183	92 - 137	46 - 91	1 - 45	
TRANSISTOR				

DIVIDER CIRCUIT A

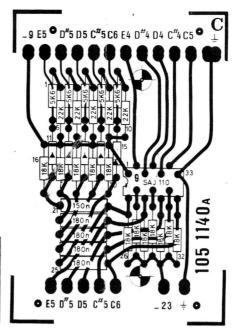
PART. NO. 005 - 0077





DIVIDER CIRCUIT B

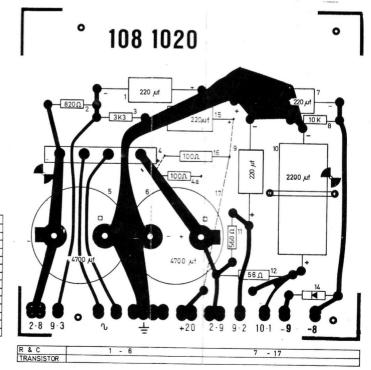
PART. NO. 005 - 0078



420 0180	DIODE	1115	
210 3562	RESISTOR	15	
210 3183	,,	16 20, 26 32	
210 3223	,	610	
310 2154	CAPACITOR	21	
310 2184		2225	
436 0110	I.C.	33	
105 1140	CIRC.BOARD		
PART NO.	NAME	POSITION NO.	

DIVIDER CIRCUIT C

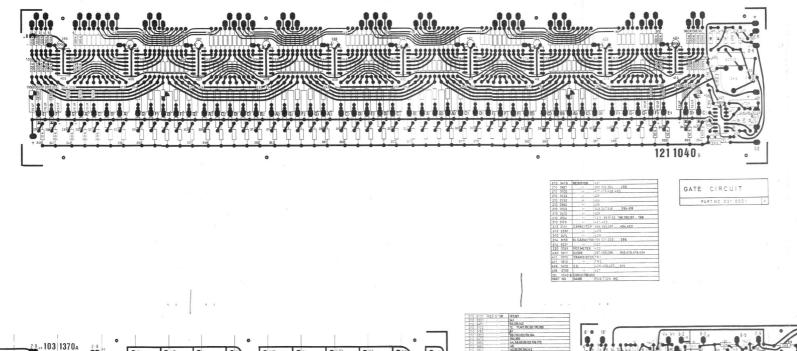
PART NO. 005 0082

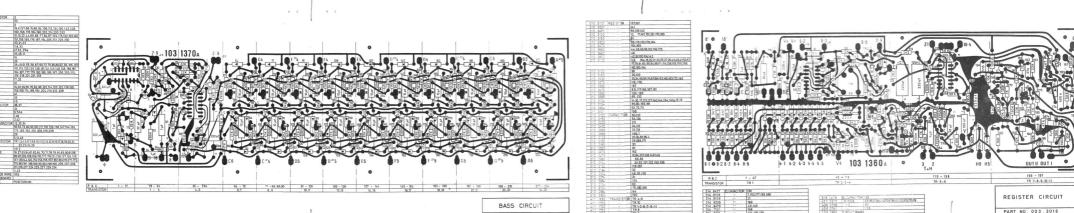


125.0116	JUMPER WIRE	17
900.0031	BEAD	2x
213 3101	RESISTOR	16
211 3101		4a
211 3561		11
211 3821		2
211 3332	**	3
211 3103	11	8
213 3569	"	12
314 6221	EL. CAPACITOR	1,7,9,15
314 6222	п	10
315 6472	и -	5.6
420 0317	DIODE	14
430 2206	RECTIFIER	4
CODE NO:	NAME	POSITION NO.

POWER SUPPLY

PART NO. 008 0066





PART NO. 003 3015